

Claim 2 (original) A method of interpolated complementary-color-filtered array image processing, comprising the steps of:

(a) provide an interpolated complementary-color-filtered array of pixel values with a pixel's yellow value denoted Y_e , cyan value denoted C_y , magenta value denoted M_g , and green value denoted G ;

(b) adjusting the color values for each pixel by

(i) subtracting a quantity $(Y_e + C_y - 2 \cdot G - M_g)/4$ from Y_e to generate the pixel's adjusted yellow value;

(ii) subtracting the quantity $(Y_e + C_y - 2 \cdot G - M_g)/4$ from C_y to generate the pixel's adjusted cyan value;

(iii) adding the quantity $(Y_e + C_y - 2 \cdot G - M_g)/4$ to M_g to generate the pixel's adjusted magenta value; and

(iv) adding the quantity $(Y_e + C_y - 2 \cdot G - M_g)/8$ to G to generate the pixel's adjusted green value.

Claim 3 (currently amended) An interpolator for complementary-color-filtered array image, comprising:

(a) ~~an~~ a subarray-to-array interpolator for the color subarrays of a complementary-color-filtered array;

(b) a filter coupled to the output of the interpolator to adjust the interpolated colors at each pixel by adjusting with an imbalance factor for the pixel.

Claim 4 (new) The interpolator of claim 3, wherein said subarray-to-array interpolator and said filter are implemented as a program on a programmable processor.